



Minimal Impact Rescue Code

ASF Australian Cave Rescue Commission

To help protect Australia's caves the Australian Cave Rescue Commission, in conjunction with the NSW Cave Rescue Squad, has produced the Minimal Impact Rescue Code.

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Preface

This Minimal Impact Rescue Code (the MIRC) is to guide rescue squads in the conservation, protection and sustainable use of appropriate caves being accessed by rescue organizations unfamiliar with the Australian Speleological Federation Inc. codes for cave protection and conservation. This code is derived from and closely follows the ASF Code of Ethics and the ASF Minimal Impact Caving Code (MICC). This MIRC should be used in conjunction with the ASF Code of Ethics and the ASF Minimal Impact Caving Code (the MICC) and not as a substitute.

The need for a Minimal Impact Rescue Code (MIRC) has evolved over many years as cavers and cave managers have realised the impact that they have on caves. The impact that practice cave rescues have are so diverse and varied that it has become necessary to devise a code that ensures that rescue operators are aware of the measures that are necessary to reduce their impact on caves in a practice rescue.

It is important that you understand that a MIRC for Cave Rescue, is necessary because rescue operators operating in caves can be a major source of damage to caves. Read the MIRC for Cave Rescue carefully and apply it to all practice cave rescues - it will not completely stop damage to caves but it will certainly reduce the impact on the cave environment. This MIRC was devised by cavers and cave rescue operators for Cave rescue practices and authentic cases - please assist the caves of Australia by using these simple techniques.

We are discussing here a code which will ensure that practice cave rescues have a minimal impact on the cave they are set in. In many instances the practices may not apply as the impact that they have may be minuscule compared to natural impacts on the cave - such as flooding of the entire cave for example. These practices are intended to apply in caves where rescue operators are likely to have a detrimental impact on the cave purely by entering the cave.

In-cave marking refers to the use of a variety of materials to define tracks, routes and barricades in a cave. These measures are taken to protect sensitive areas, confine foot damage, make rescue teams aware that a sensitive (it may be a less obvious cave animal's territory) area exists.

There are no exceptions to this code - surveyors, photographers, scientists, explorers, cave rescue operators etc are all subject to this code.

Introduction

1. Although their primary aim is the provision of rescue services and training for rescue in and from caves, nevertheless rescue operators will actively promote cave conservation and sound management practices through example, education, advice and training.
2. This code establishes a minimum standard of conservation to be undertaken by any rescue operator.
3. Higher standards may be required by management authorities for particular caves or karst regions, in which case those standards will be adhered to.

General Ethics

1. Landowners, Management authorities and their staff or representatives will be treated with courtesy and respect.
2. All rescue personnel must have specific or tacit approval from the landowner and/or management authority before entering any property or reserve, must follow only agreed routes and must not visit forbidden areas.
3. The prevailing procedures regarding gates on properties and reserves will be followed and care taken to cause no damage to stock, crops, equipment or landscape features.
4. No cave excavation, including the use of explosives will be undertaken without the permission of the landowner and/or management authority and the controlling authority of the rescue organization and only after an assessment of environmental effect.
5. Recognised codes for minimum impact camping will be observed with particular emphasis on complete removal of rubbish and, wherever possible, avoidance of camping on karst catchment areas.
6. Reports on rescue practices and caving activities are to be accurate, avoiding sensationalism or exaggeration.
7. Consideration should be given before publishing an article disclosing a cave's location, as to the intended wishes of the landowner and/or management authority, and subsequent effect on the cave.
8. When visiting an area frequented by another caving body, the rescue organiser will cooperate fully with the caving trip leader.

General Cave Rescue

1. Remember every exercise in a cave has an impact. Is this exercise in this cave necessary? If it is for cave rescue training, is there another cave that is less vulnerable to damage that can be made use of? Make this assessment depending on the purpose of your visit, the size and experience of the trainees/rescue operators, and if the practice is likely to damage the cave---do not use the cave.
2. Where possible above and underground controllers should have visited the cave previously and hence should be aware of sensitive features of the cave, the best anchor points, and generally reduce the need for unnecessary access to other sections of cave.
3. Cave slowly. There will be less chance of damage to the cave and to yourself. This especially applies when you are tired. All rescue personnel should be in the cave for no more than 3 hours then relieved by fresh personnel.
4. Keep operating team size small - 4 to 6 is a good team size. Generally the maximum size of any rescue team should be limited to the expertise required (no more than two trainees to one experienced operator).
5. If there are trainees on a trip, make sure that they are teamed with experienced operators, so that the expertise can be passed to them when required, eg. in difficult situations. Ensure that the team operates at the pace of the slowest team member.
6. Operate as a team - help each other to minimize damage to the cave. Don't split up unless impact is reduced by doing so.
7. Ensure that team members don't wander about the cave unnecessarily.
8. Constantly watch your head placement and that of your team members. Let them know before they are likely to do any damage the cave.
9. Keep gear packs as small as possible and don't use sensitive caves or extensions to the cave.
10. Stay on all marked or obvious paths. If no paths are marked or none is obvious - define one with flagging tape (don't forget to remove the tape at the end of the exercise).
11. Learn to recognise cave deposits or features that may be damaged by walking or crawling on them. Examples are:- Drip Holes, Stream Sediments, Paleo Soils, Soil Cones, Crusts, Flowstones, False Floors, Cave Pearls, Asphodilites, Bone Material, Potential Archaeological Sites, Cave Fauna, Coffee & Cream and Tree Roots.
12. Take care in the placement of hands and feet through the cave.

13. If an area of cave is obviously being degraded examine the site carefully to determine if an alternative route is possible. Any alternative route **MUST** not cause the same or greater degradation than the currently used route. If an alternative is available suggest the alternative route to the appropriate management authority and report the degradation.
14. Note any missing marking materials while in the cave so it may be restored later. Tape off sensitive areas prior to the practice. If you believe damage is occurring during a practice stop the proceedings till damage has been overcome and report any damage to the appropriate management authority.
15. If it is necessary to walk on flowstone in a cave remove any muddied boots and or clothing before proceeding or don't proceed! Sometimes it is better to assess the situation and not damage any cave feature.
16. Treat the cave biota with respect, watch out for them, and avoid damaging them and their "traps", webs, etc. Also avoid directly lighting cave biota if possible. No disturbance should be caused to maternity or over-wintering roosts of bats.
17. Wash your caving overalls and boots regularly so that the spread of bacteria and fungi are minimised.
18. If bone material is found it should be reported to the appropriate management authority, do not touch or remove if termination of a practice is necessary do so.
19. Do not eat inappropriate food in a cave (such as biscuits or cake as it is difficult to avoid leaving crumbs). If it is necessary to eat, ensure that small food fragments are not dropped as this may impact the cave biota. One way to stop this is to carry a plastic bag to eat over or spread a large plastic sheet on the ground to catch the food fragments. This can then be folded up and removed from the cave.
20. Rescue operators will not smoke in any cave.
21. Camping will not occur in a cave, unless absolutely necessary to achieve a specific rescue training objective.
22. Ensure that all foreign matter is removed from caves. This includes human waste. If long trips are to be made into a cave, ensure that containers for the removal of liquid and solid waste are included on the trip inventory.
23. When rigging caves with artificial anchors, eg. Tapes, rope etc, ensure that minimal damage occurs to the anchor site by protecting the site. For example protect frequently used anchors, eg. Trees, with carpet, packs, cloth, etc. Bolts should only be used in an authentic rescue situation if natural anchors are inappropriate. Traces should not be used.
24. Rescue activity must be conducted in a manner responsible to the cave environment, taking particular care to avoid damage to speleothems, sediments, biota and other natural phenomena.

25. Cave entrances and passages should not be excavated/enlarged, water levels in sumps should not be modified and stream flows should not be diverted until all possible effects are assessed and the appropriate permission gained. Any modification must be the minimum required.
26. Establish routes and mark them for other operators; a Michiephone cable or phone cable may be appropriate, single tracks should be followed and care taken to avoid needless deposition of mud. Mud-throwing or modeling is unacceptable.
27. Caves must not be disfigured by unnecessary marking (including direction arrows).
28. The use of metal stretchers will only be undertaken in an authentic rescue if no other is available, metal stretchers will never be used in a practice rescue. Cave softly!

New Cave or New Extension to a Known Cave

1. The existing microbiology of the new cave, fungi, bacteria, and a world of protozoa, will almost certainly be irreversibly contaminated on the first trip into the cave!
2. Do not enter a new area if you do not have the equipment or skills required to undertake the minimal activities.
3. The minimal activity should be in-cave marking and surveying---not purely exploration.
4. Ensure that all alternative routes are examined before any damage occurs. It may not be necessary to enter some areas as they can be by-passed.
5. Having determined that a sensitive area is to be crossed it should always be marked. Reduce future damage by defining a distinct, minimal width track.
6. Discuss in-cave marking within the party and ensure that all ideas are evaluated before marking is undertaken.
7. Cave softly!